Amendments to the Specification:

Please replace the paragraph beginning on page 3, line 19, with the following rewritten paragraph:

Furthermore, combining dry processes and wet processes creates additional problems in that transportation of work (intermediates products of the magnetic recording medium) becomes more difficult, and production efficiency deteriorates.

Please replace the paragraphs beginning on page 5, line 16, with the following rewritten paragraphs:

(1) A method of producing a magnetic recording medium comprising: a recording layer processing step, which by forming a plurality of grooves, with a ~~minute~~ spacing therebetween in the planar direction, in an intermediate product ~~from a production process for a magnetic recording medium~~ produced by forming a continuous recording layer on top of a substrate surface, partitions the continuous recording layer into a plurality of partitioned recording elements; a non-magnetic body filling step for filling the grooves between the partitioned recording elements with a non-magnetic body; and a protective layer formation step for forming a protective layer that protects the partitioned recording elements and the non-magnetic body, wherein the recording layer processing step is conducted with the environment surrounding the intermediate product maintained in a state of vacuum.

(2) The method of producing a magnetic recording medium according to (1), wherein

said recording layer processing step, said non-magnetic body filling step, and said protective layer formation step are conducted sequentially with an environment surrounding said intermediate product maintained in a state of vacuum.

Please replace the paragraph beginning on page 7, line 18, with the following rewritten paragraph:

in said non-magnetic body filling step, said non-magnetic body is used to fill said grooves between said partitioned recording elements using either one of plasma CVD with bias power to said intermediate product and bias sputtering.

Please replace the paragraph beginning on page 8, line 20, with the following rewritten paragraph:

recording layer processing device, which by forming a plurality of grooves, with a ~~minute~~ spacing therebetween in a planar direction, in an intermediate product ~~from a production process for a magnetic recording medium~~ produced by forming a continuous

recording layer on top of a substrate surface, partitions said continuous recording layer into a plurality of partitioned recording elements; and

vacuum retention device, which houses said recording layer processing device, and maintains an environment surrounding said intermediate product in a state of vacuum.

Please replace the paragraph beginning on page 10, line 18, with the following rewritten paragraph:

Fig. 2 is a side sectional view showing a schematic illustration of the structure of an intermediate product of a magnetic recording medium prior to processing with the same production apparatus;

Please replace the paragraphs beginning on page 11, line 2, with the following rewritten paragraphs:

Fig. 5 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following the transfer of a partition pattern into the third mask layer;

Fig. 6 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following the removal of those sections of the third mask layer at the bottom surfaces of the concave sections;

Fig. 7 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following the removal of those sections of the second mask layer at the bottom surfaces of the concave sections;

Fig. 8 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following the removal of those sections of the first mask layer at the bottom surfaces of the concave sections;

Fig. 9 is a side sectional view showing a schematic illustration of the shape of the above intermediate product with the partitioned recording elements formed;

Fig. 10 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following the removal of those sections of the first mask layer remaining on the upper surface of the partitioned recording elements;

Fig. 11 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following filling of the spaces between the partitioned recording elements with a non-magnetic body;

Fig. 12 is a side sectional view showing a schematic illustration of the shape of the above intermediate product following smoothing of the surfaces of the partitioned recording elements and the non-magnetic body;

Please replace the paragraphs beginning on page 13, line 2, with the following rewritten paragraphs:

First, in order to facilitate a better understanding of the structure of the production apparatus for magnetic recording media, a simple description is given of the structures of the magnetic recording medium intermediate product and the magnetic recording medium itself.

As shown in Fig. 2, the magnetic recording medium intermediate product 10 comprises a glass substrate 12 with a backing layer 14, a soft magnetic layer 16, an orientation layer 18, a continuous recording layer 20, a first mask layer 22, a second mask layer 24, and a third mask layer 26 formed sequentially thereon.

Please replace the paragraph beginning on page 13, line 23, with the following rewritten paragraph:

As shown in Fig. 3, the magnetic recording medium 30 is a perpendicular recording, discrete type recording disk, wherein the continuous recording layer 20 is partitioned into a plurality of partitioned recording elements 31 by ~~minute~~ spacings formed along the radial direction of the tracks, a non-magnetic body 32 fills the grooves 33 between the partitioned recording elements 31, and a protective layer 34 and a lubricating layer 36 are formed sequentially on top of the partitioned recording elements 31 and the non-magnetic body 32. A barrier film 38 is formed between the partitioned recording elements 31 and the non-magnetic body 32.

Please replace the paragraphs beginning on page 14, line 14, with the following rewritten paragraphs:

Returning to Fig. 1, the magnetic recording medium production apparatus 40 comprises recording layer processing device 42 for forming the partitioned recording elements 31 by forming the grooves 33 in the intermediate product 10, dry process cleaning device 44 for removing foreign matter from the environment surrounding the partitioned recording elements 31, barrier film formation device 46 for forming the barrier film 38 on the partitioned recording elements 31, non-magnetic body filling device 48 for filling the grooves 33 between the partitioned recording elements 31 with the non-magnetic body 32, smoothing device 50 for smoothing the surface of the partitioned recording elements 31 and the non-magnetic body 32, protective layer formation device 52 for forming the protective layer 34 on

the partitioned recording elements 31 and the non-magnetic body 32, and vacuum retention device 56 which houses the recording layer processing device 42, the dry process cleaning device 44, the barrier film formation device 46, the non-magnetic body filling device 48, the smoothing device 50, and the protective layer formation device 52, and maintains the environment surrounding the intermediate product 10 in a state of vacuum.

In addition, the production apparatus 40 also comprises transfer device 58 for transferring a partition pattern onto the third mask layer 26 of the magnetic recording medium intermediate product 10, and lubricating layer formation device 54 for forming the lubricating layer 36 on top of the protective layer 34. The transfer device 58 and the lubricating layer formation device 54 are positioned outside the vacuum retention device 56.

Please replace the paragraphs beginning on page 17, line 11, with the following rewritten paragraphs:

First, a magnetic recording medium intermediate product 10 is prepared. The intermediate product 10 is formed by using sputtering to form sequentially, on top of a glass substrate 12, a backing layer 14 with a thickness of 300 to 2000 Å, a soft magnetic layer 16 with a thickness of 500 to 3000 Å, an orientation layer 18 with a thickness of 30 to 300 Å, a continuous recording layer 20 with a thickness of 100 to 300 Å, a first mask layer 22 with a thickness of 100 to 500 Å, and a second mask layer 24 with a thickness of 100 to 300 Å, and then using either spin coating or dipping to form a third mask layer 26 with a thickness of 300 to 3000 Å.

The transfer device 58 then uses a nano-imprint method to transfer the type of concave sections shown in Fig. 5, which correspond with the partition pattern for the partitioned recording elements 31, into the third mask layer 26 of the intermediate product 10.

At this point the intermediate product 10 is transported into the vacuum chamber 68, and the plasma processing device 60 is used to process the third mask layer 26 until those sections of the third mask layer 26 at the bottom surfaces of the concave sections have been removed, as shown in Fig. 6. Those areas of the third mask layer 26 outside the concave sections are also partially removed, but the level difference between these other areas and the bottom surfaces of the concave sections is retained.

Please replace the paragraphs beginning on page 21, line 12, with the following rewritten paragraphs:

Because the formation and processing of the partitioned recording elements 31 is conducted with the environment surrounding the intermediate product 10 in a state of

vacuum, deterioration of the partitioned recording elements 31 through oxidation or corrosion can be prevented during processing.

In addition, the intermediate product 10 is transported into the vacuum chamber 68 with the continuous recording layer 20 covered by the various mask layers, and once inside the vacuum chamber 68 the partitioned recording elements 31 are formed, filling of the non-magnetic body 32 is performed, and the protective layer 34 is formed on top of the partitioned recording elements 31 and the non-magnetic body 32 before the magnetic recording medium 30 is transported out of the vacuum chamber 68, and consequently the partitioned recording elements 31 (and the continuous recording layer 20) are isolated from atmospheric oxygen and the like at all times, meaning deterioration of the partitioned recording elements 31 can be even more reliably prevented.

Please replace the paragraph beginning on page 23, line 11, with the following rewritten paragraph:

Furthermore, in the present embodiment three mask layers of different materials are formed on the continuous recording layer 20, and a four-stage dry etching process is then used to form the grooves 33 in the intermediate product 10 and partition the continuous recording layer 20, but there are no particular restrictions on the type of dry etching used, the materials used for the mask layers, the number of mask layers, or the thickness of the mask layers, provided the continuous recording layer 20 is able to be partitioned with a high level of precision.

Please replace the paragraphs beginning on page 24, line 3, with the following rewritten paragraphs:

In addition, in the present embodiment the non-magnetic body filling device 48 uses a bias sputtering method, but the present invention is not restricted to this method, and the filling of the non-magnetic body could also be performed using a plasma CVD method with bias power to said magnetic recording medium intermediate product 10.

Furthermore, in the present embodiment the magnetic recording medium 30 is a perpendicular recording, discrete type magnetic disk in which the partitioned recording elements 31 are arranged with ~~minute~~ spacings in the track radial direction positioned therebetween, but the present invention is not restricted to this case, and can of course also be applied to the production of magnetic disks in which the partitioned recording elements are arranged with ~~minute~~ spacings in the track circumferential direction (the sector direction) positioned therebetween, magnetic disks in which the partitioned recording elements are

arranged with ~~minute~~ spacings in both the track radial direction and the track circumferential direction positioned therebetween, and magnetic disks in which the partitioned recording elements form a helical shape. Furthermore, the present invention can also be applied to the production of magneto-optical disks such as MO disks, and other non-disk type discrete type magnetic recording media such as magnetic tapes and the like.

Furthermore, in the present embodiment~~ecbidiment~~ the magnetic recording medium production apparatus 40 is equipped with a separate processing device for each of the steps, but the present invention is not restricted to such a configuration, and a plurality of steps could also be conducted with a single device. For example, the step for processing the first mask layer 22, and the step for removing the residual first mask layer 22 from the surface of the partitioned recording elements 31 could be conducted using the same reactive ion etching device, using either CF_4 or SF_6 as the reactive gas. In addition, the step for processing the second mask layer 24, and the step for smoothing the partitioned recording elements 31 and the non-magnetic body 32 could be conducted using the same Ar gas ion beam etching device. These rationalizations enable reductions in both the size and the cost of the production apparatus.

Please replace the Abstract with the attached amended Abstract.